OIPE

RAW SEQUENCE LISTING   DATE: 02/12/2002
PATENT APPLICATION: US/10/051,843   TIME: 12:05:14

Input Set : **F:\AHP 98133 cip.txt**
Output Set: **N:\CRF3\02122002\J051843.raw**

SEQUENCE LISTING   **ENTERED**

```
 4 (1) GENERAL INFORMATION:
 6       (i) APPLICANT: YOUNG, KATHLEEN H.
 7                      RHODES, KENNETH J.
 9      (ii) TITLE OF INVENTION: METHODS FOR IDENTIFYING MODULATORS OF
10                               N-TYPE ION CHANNEL INACTIVATION
12     (iii) NUMBER OF SEQUENCES: 23
14      (iv) CORRESPONDENCE ADDRESS:
15           (A) ADDRESSEE: AMERICAN HOME PRODUCTS CORPORATION
16           (B) STREET: FIVE GIRALDA FARMS -- ATTN. KAY E. BRADY
17           (C) CITY: MADISON
18           (D) STATE: NEW JERSEY
19           (E) COUNTRY: US
20           (F) ZIP: 07940
22       (v) COMPUTER READABLE FORM:
23           (A) MEDIUM TYPE: CD-R
24           (B) COMPUTER: IBM PC compatible
25           (C) OPERATING SYSTEM: WINDOWS NT
26           (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
28      (vi) CURRENT APPLICATION DATA:
```
C--> `29           (A) APPLICATION NUMBER: US/10/051,843`
C--> `30           (B) FILING DATE: 17-Jan-2002`
```
31           (C) CLASSIFICATION:
33    (viii) ATTORNEY/AGENT INFORMATION:
34           (A) NAME: GAVIN T. BOGLE
35           (B) REGISTRATION NUMBER:
36           (C) REFERENCE/DOCKET NUMBER: AHP 98133 P1
38      (ix) TELECOMMUNICATION INFORMATION:
39           (A) TELEPHONE: (617) 665-8079
40           (B) TELEFAX: (617) 876-5851
44 (2) INFORMATION FOR SEQ ID NO: 1:
46       (i) SEQUENCE CHARACTERISTICS:
47           (A) LENGTH: 16 amino acids
48           (B) TYPE: amino acid
49           (C) STRANDEDNESS: not relevant
```
W--> `50           (D) TOPOLOGY: not relevant`
```
52      (ii) MOLECULE TYPE: peptide
54      (vi) ORIGINAL SOURCE:
55           (A) ORGANISM: Homo sapiens
59      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
61      Gln Ile Leu Gly Gln Thr Leu Lys Ala Ser Met Arg Glu Leu Gly Leu
62      1               5                   10                  15
65 (2) INFORMATION FOR SEQ ID NO: 2:
```

RAW SEQUENCE LISTING   DATE: 02/12/2002
PATENT APPLICATION: US/10/051,843   TIME: 12:05:14

Input Set : **F:\AHP 98133 cip.txt**
Output Set: **N:\CRF3\02122002\J051843.raw**

```
 67        (i) SEQUENCE CHARACTERISTICS:
 68            (A) LENGTH: 16 amino acids
 69            (B) TYPE: amino acid
 70            (C) STRANDEDNESS: not relevant
W--> 71        (D) TOPOLOGY: not relevant
 73       (ii) MOLECULE TYPE: peptide
 75       (vi) ORIGINAL SOURCE:
 76            (A) ORGANISM: Homo sapiens
 80       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
 82        Gln Ile Leu Gly His Thr Leu Arg Ala Ser Met Arg Glu Leu Gly Leu
 83        1           5                   10              15
 86 (2) INFORMATION FOR SEQ ID NO: 3:
 88        (i) SEQUENCE CHARACTERISTICS:
 89            (A) LENGTH: 48 base pairs
 90            (B) TYPE: nucleic acid
 91            (C) STRANDEDNESS: single
 92            (D) TOPOLOGY: linear
 94       (ii) MOLECULE TYPE: DNA (genomic)
 96       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
 98 GATCCTGGGC CAGACCCTCA AAGCTAGTAT GAGAGAGCTA GGGCTGCT                    48
102 (2) INFORMATION FOR SEQ ID NO: 4:
104        (i) SEQUENCE CHARACTERISTICS:
105            (A) LENGTH: 48 base pairs
106            (B) TYPE: nucleic acid
107            (C) STRANDEDNESS: single
108            (D) TOPOLOGY: linear
110       (ii) MOLECULE TYPE: DNA (genomic)
112       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
114 GATCCTGGGC CACACCCTCA GAGCCAGCAT GCGGGAACTG GGCCTTCT                    48
119 (2) INFORMATION FOR SEQ ID NO: 5:
121        (i) SEQUENCE CHARACTERISTICS:
122            (A) LENGTH: 30 amino acids
123            (B) TYPE: amino acid
124            (C) STRANDEDNESS: not relevant
W--> 125        (D) TOPOLOGY: not relevant
127       (ii) MOLECULE TYPE: peptide
129       (vi) ORIGINAL SOURCE:
130            (A) ORGANISM: Homo sapiens
134       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
136        Met Gln Val Ser Ile Ala Cys Thr Glu His Asn Leu Lys Ser Arg Asn
137        1           5                   10              15
139        Gly Glu Asp Arg Leu Leu Ser Lys Gln Ser Ser Thr Ala Pro
140                    20                  25                  30
142 (2) INFORMATION FOR SEQ ID NO: 6:
144        (i) SEQUENCE CHARACTERISTICS:
145            (A) LENGTH: 30 amino acids
146            (B) TYPE: amino acid
147            (C) STRANDEDNESS: not relevant
W--> 148        (D) TOPOLOGY: not relevant
```

RAW SEQUENCE LISTING   DATE: 02/12/2002
PATENT APPLICATION: US/10/051,843   TIME: 12:05:14

Input Set : **F:\AHP 98133 cip.txt**
Output Set: **N:\CRF3\02122002\J051843.raw**

```
150      (ii) MOLECULE TYPE: peptide
152      (vi) ORIGINAL SOURCE:
153              (A) ORGANISM: Homo sapiens
157      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
159      Met Glu Val Ala Met Val Ser Ala Glu Ser Ser Gly Cys Asn Ser His
160      1                   5                   10                  15
162      Met Pro Tyr Gly Tyr Ala Ala Gln Ala Arg Ala Arg Glu Arg
163                      20                  25                  30
166 (2) INFORMATION FOR SEQ ID NO: 7:
168      (i) SEQUENCE CHARACTERISTICS:
169              (A) LENGTH: 90 base pairs
170              (B) TYPE: nucleic acid
171              (C) STRANDEDNESS: single
172              (D) TOPOLOGY: linear
174      (ii) MOLECULE TYPE: DNA (genomic)
176      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
178 ATGCAAGTCT CCATAGCCTG CACAGAGCAC AATTTGAAGA GTCGGAATGG TGAGGACCGA        60
180 CTTCTGAGCA AGCAGAGCTC CACCGCCCCC                                        90
185 (2) INFORMATION FOR SEQ ID NO: 8:
187      (i) SEQUENCE CHARACTERISTICS:
188              (A) LENGTH: 90 base pairs
189              (B) TYPE: nucleic acid
190              (C) STRANDEDNESS: single
191              (D) TOPOLOGY: linear
193      (ii) MOLECULE TYPE: DNA (genomic)
195      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
197 ATGGAGGTTG CAATGGTGAG TGCGGAGAGC TCAGGGTGCA ACAGTCACAT GCCTTATGGT        60
199 TATGCTGCCC AGGCCCGGGC CCGGGAGCGG                                        90
202 (2) INFORMATION FOR SEQ ID NO: 9:
204      (i) SEQUENCE CHARACTERISTICS:
205              (A) LENGTH: 59 base pairs
206              (B) TYPE: nucleic acid
207              (C) STRANDEDNESS: single
208              (D) TOPOLOGY: linear
210      (ii) MOLECULE TYPE: DNA (genomic)
213      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
215 CATGGAGCAG ATCCTGGGCC AGACCCTCAA AGCTAGTATG AGAGAGCTAG GGCTGTAAG         59
218 (2) INFORMATION FOR SEQ ID NO: 10:
220      (i) SEQUENCE CHARACTERISTICS:
221              (A) LENGTH: 59 base pairs
222              (B) TYPE: nucleic acid
223              (C) STRANDEDNESS: single
224              (D) TOPOLOGY: linear
226      (ii) MOLECULE TYPE: DNA (genomic)
228      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
230 GATCCTTACA GCCCTAGCTC TCTCATACTA GCTTTGAGGG TCTGGCCCAG GATCTGCTC         59
233 (2) INFORMATION FOR SEQ ID NO: 11:
235      (i) SEQUENCE CHARACTERISTICS:
236              (A) LENGTH: 55 base pairs
```

RAW SEQUENCE LISTING   DATE: 02/12/2002
PATENT APPLICATION: US/10/051,843   TIME: 12:05:14

Input Set : **F:\AHP 98133 cip.txt**
Output Set: **N:\CRF3\02122002\J051843.raw**

```
237              (B) TYPE: nucleic acid
238              (C) STRANDEDNESS: single
239              (D) TOPOLOGY: linear
241        (ii) MOLECULE TYPE: DNA (genomic)
245        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
247 CCGAATTCGA CATATGAAAA TGCAAGTCTC CATAGCCTGC ACAGAGCACA ATTTG        55
250 (2) INFORMATION FOR SEQ ID NO: 12:
252        (i) SEQUENCE CHARACTERISTICS:
253              (A) LENGTH: 42 base pairs
254              (B) TYPE: nucleic acid
255              (C) STRANDEDNESS: single
256              (D) TOPOLOGY: linear
258        (ii) MOLECULE TYPE: DNA (genomic)
260        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
262 ACGGATCCCC GAATTCCATT ATGATCTATA GTCCTTCTTG CT                      42
265 (2) INFORMATION FOR SEQ ID NO: 13:
267        (i) SEQUENCE CHARACTERISTICS:
268              (A) LENGTH: 45 base pairs
269              (B) TYPE: nucleic acid
270              (C) STRANDEDNESS: single
271              (D) TOPOLOGY: linear
273        (ii) MOLECULE TYPE: DNA (genomic)
275        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
277 ACGGATCCCC GAATTCCATT AATCTGAAAT TTGACCTCCA AATGT                   45
280 (2) INFORMATION FOR SEQ ID NO: 14:
282        (i) SEQUENCE CHARACTERISTICS:
283              (A) LENGTH: 59 base pairs
284              (B) TYPE: nucleic acid
285              (C) STRANDEDNESS: single
286              (D) TOPOLOGY: linear
288        (ii) MOLECULE TYPE: DNA (genomic)
290        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:
292 CATGGAGCAG ATCCTGGGCC ACACCCTGAG AGCCAGCATG CGGGAACTGG GCCTTTAAG     59
295 (2) INFORMATION FOR SEQ ID NO: 15:
297        (i) SEQUENCE CHARACTERISTICS:
298              (A) LENGTH: 59 base pairs
299              (B) TYPE: nucleic acid
300              (C) STRANDEDNESS: single
301              (D) TOPOLOGY: linear
303        (ii) MOLECULE TYPE: DNA (genomic)
305        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:
307 GATCCTTAAA GGCCCAGTTC CGGCATGCTG GCTCTGAGGG TGTGGCCCAG GATCTGCTC     59
310 (2) INFORMATION FOR SEQ ID NO: 16:
312        (i) SEQUENCE CHARACTERISTICS:
313              (A) LENGTH: 60 base pairs
314              (B) TYPE: nucleic acid
315              (C) STRANDEDNESS: single
316              (D) TOPOLOGY: linear
318        (ii) MOLECULE TYPE: DNA (genomic)
```

● ●

```
320     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:
322 CGAATTCATA TGCGGATCCG TAGAATGGAG GTTGCAATGG TGAGTGCGGA GAGCTCAGGG     60
325 (2) INFORMATION FOR SEQ ID NO: 17:
327     (i) SEQUENCE CHARACTERISTICS:
328         (A) LENGTH: 41 base pairs
329         (B) TYPE: nucleic acid
330         (C) STRANDEDNESS: single
331         (D) TOPOLOGY: linear
333     (ii) MOLECULE TYPE: DNA (genomic)
335     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:
337 GGTCGACGAA TTCGTTACCT TGCAGGATCG GAGCTCTCGT G                         41
340 (2) INFORMATION FOR SEQ ID NO: 18:
342     (i) SEQUENCE CHARACTERISTICS:
343         (A) LENGTH: 59 base pairs
344         (B) TYPE: nucleic acid
345         (C) STRANDEDNESS: single
346         (D) TOPOLOGY: linear
348     (ii) MOLECULE TYPE: DNA (genomic)
350     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:
352 CATGGAGCAG ATCCTGGGCC ACACCCTCAG AGCCAGCATG CGGCAACTGG GCCTTTAAG      59
355 (2) INFORMATION FOR SEQ ID NO: 19:
357     (i) SEQUENCE CHARACTERISTICS:
358         (A) LENGTH: 59 base pairs
359         (B) TYPE: nucleic acid
360         (C) STRANDEDNESS: single
361         (D) TOPOLOGY: linear
363     (ii) MOLECULE TYPE: DNA (genomic)
365     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:
367 GATCCTTAAA GGCCCAGTTG CCGCATGCTG GCTCTGAGGG TGTGGCCCAG GATCTGCTC      59
370 (2) INFORMATION FOR SEQ ID NO: 20:
372     (i) SEQUENCE CHARACTERISTICS:
373         (A) LENGTH: 59 base pairs
374         (B) TYPE: nucleic acid
375         (C) STRANDEDNESS: single
376         (D) TOPOLOGY: linear
378     (ii) MOLECULE TYPE: DNA (genomic)
380     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 20:
382 AATTCCAGAT CCTGGGCCAG ACCCTCAAAG CTAGTATGAG AGAGCTAGGG CTGTAAGCC      59
385 (2) INFORMATION FOR SEQ ID NO: 21:
387     (i) SEQUENCE CHARACTERISTICS:
388         (A) LENGTH: 59 base pairs
389         (B) TYPE: nucleic acid
390         (C) STRANDEDNESS: single
391         (D) TOPOLOGY: linear
393     (ii) MOLECULE TYPE: DNA (genomic)
395     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 21:
397 TCGAGGCTTA CAGCCCTAGC TCTCTCATAC TAGCTTTGAG GGTCTGGCCC AGGATCTGG      59
400 (2) INFORMATION FOR SEQ ID NO: 22:
402     (i) SEQUENCE CHARACTERISTICS:
```

VERIFICATION SUMMARY
PATENT APPLICATION: **US/10/051,843**

DATE: 02/12/2002
TIME: 12:05:15

Input Set : **F:\AHP 98133 cip.txt**
Output Set: **N:\CRF3\02122002\J051843.raw**

```
L:29 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:30 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:50 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=1
L:71 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=2
L:125 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=5
L:148 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=6
```